

ECHO IRELAND

Journal of the
Irish Radio Transmitters Society
September/October 2005

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The views expressed in Echo Ireland do not necessarily represent the views of the Society or the Editor

**Deadline for next edition
November 30th**

**Shannon Basin Challenge
November 6th 1400-1800
(See page 21)**

**Mayo Rally
November 20th 2005
Belmont Hotel, Knock.**

**Theory Examination
Wednesday January 18th 2006
ComReg Offices, Dublin**

**2006 Limerick Rally
Sunday 12th March 2006
Greenhills Hotel, Limerick**

**IRTS AGM 2006
Cork
April 22/23rd 2006**



SSB Field Day at Garbally College, Ballinasloe, September 2005

Back Row L to R: Kieran EI4FFB, Enda EI2II, Gary EI5FUB, Fergus EI6IB, Paul EI6FE, Paul EI5DI, Peter EI7CC, Aidan EI8CE, Keith EI4JM, Paul EI2CA, Danny EI5HD, Gareth EI5FYB.
Front Row: Mickey EI6EAB, Niall EI4CF, Noel EI6HW, Chris Kirkby, Pat EI9HX, Tony EI6EW.

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News Bulletins and Readers

Sunday				
Dublin	1100	7.043	SSB	Colm EI3H, Sean EI7CD, Gerry EI8CC
Wicklow	1130	3.680	SSB (as Gaeilge)	Paddy EI7GK
Dublin	1145	145.525	FM	Sean EI5GH, Brendan EI8IB
Dublin	1200	3.650	SSB	As 1100
Tipperary	2030	145.450	FM	Tommy EI7IT, John EI2JB
Dublin	2130	145.525	FM	As 1145
Monday				
Cork	2000	145.750	FM	Con EI7DJB, Vincent EI7HN
Limerick	2000	145.725	FM	Brian EI9AL, Tony EI2AW
Louth	2000	145.675		Peter EI4HX, Thos EI2JD
Galway	2000	145.625		Aengus EI4ABB, Richard EI5GC
Tuesday				
Waterford	2130	145.650	FM	John EI8JA, Robbie EI8FZB

Dermot EI2AK Silent Key

It is with regret that we report the death of Dermot Cowley EI2AK of Monasterboice Co. Louth. Dermot had been ill for some time and died peacefully at his home on Wednesday October 19th. . He maintained an active interest in amateur radio right up to his death. To his wife Ann and to his family, we extend our deepest sympathy. May he rest in peace

IRTS Committee Members 2005/06

President	Sean Donelan EI4GK
V/President	Fr. Finbarr Buckley EI1CS
	Paul Martin EI2CA
	John Ketch EI2GN
	Pat Fitzpatrick EI2HX
	Noel Walsh EI2JC
	Brendan De hÓra EI3GV
	Joe Fadden EI3IX
	Peter Grant EI4HX
	Paul O' Kane EI5DI
	Sean Nolan EI7CD
	Brian Canning EI8IU
	Pat O'Connor EI9HX

Club Representatives

Dave Moore EI4BZ (East Cork Group)
Stephen O'Leary EI6JA (Cork Radio Club)
Mark Condon EI6JK (South Dublin R.C.)

Clubs are encouraged to send observers to committee meetings. Clubs with fifteen IRTS members can nominate a club representative who has full voting rights on the committee.

Dubus Magazine

IRTS has been appointed as the Irish distributor for the DUBUS Magazine, a quarterly magazine for VHF, UHF and Microwave enthusiasts.

This is a publication that no serious VHF/UHF/Microwave DXer should be without.

It is mailed directly to subscribers from the publishers in Germany.

The annual subscription is €22.00 and should be forwarded to:

Dave Moore, EI4BZ,
Dooneen, Carrigtwohill, Co. Cork.

Joe O'Driscoll EI7CRB Silent Key



As most of us are now aware, Joe Driscoll EI 7 CRB passed away last Tuesday morning, 6th September. To the best of my knowledge, Joe has been a member of Fingal Radio Club among others, for almost 30 years. He secured his license and call-sign, of which he was very proud, about 1980.

Joe was about 84 years of age and had not enjoyed the best of health over the last year or so. Joe was born in Bantry in Co Cork. He joined the Irish army in 1938 and served for most of the 2nd world war, and then formally joined the Garda Siochana, on 6th June 1944, where he spent the remainder of his working life. He rose through the ranks and retired as a Superintendent.

My own personal memory of Joe was his unstinting service and advice to Fingal Radio Club and its members. He always seemed at his best when we had our Radio Shows, in Malahide and Jury's when with Harry Boyle he supervised the door and the taking of monies, from the stall holders and visitors.

Over the years he regaled us with stories of his life in the Garda Siochana, and the early days of the state. These stories helped me personally to understand the history of that time.

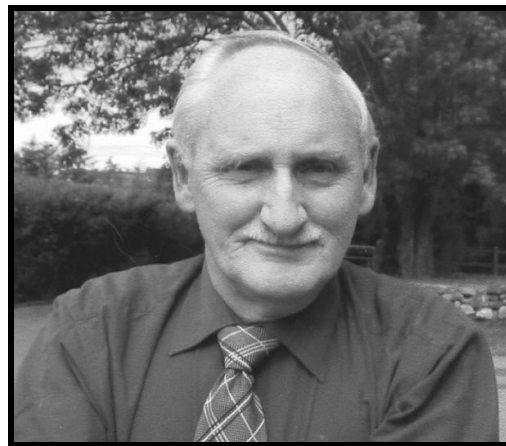
He was a regular user of 2 meters and often acted as net controller of EI 2 IPA (The International Police Association) on a Thursday evening, together with regular call in's to the Sunday IRTS news. Joe was buried on Thursday 8th September 2005. Later that evening a number of radio amateurs, who had regular contact with Joe, came up on the frequency of 3.765 the usual HF frequency. The net was begun by Sean, EI7CV, and Bill, G3PFE, who were joined by Aidan, EI5HW, Andy, EI5JF, Pat, EI6DA, Charlie, G0MIJ, and finally Hugh, EI2HI who took over as net controller.

Joe kindly agreed to be trustee of Fingal Radio Club for the last few years, and helped to keep the members on the straight and narrow, in many things. Joe will be remembered by the members of Fingal Radio Club as a gentle man and a gentleman. I extend sympathy to his wife and family.

May he rest in peace.

Christopher Yeates EI7AAB
Chairman, Fingal Radio Club

Martin O'Dea EI3FI Silent Key



The Final Entry in the Logbook of EI3FI was recorded in July 2005.

To Dymphna (his XYL), Shane, Karen and Grace (his Jnr Ops.) and the wider extended O'Dea family this entry was untimely, sudden and above all a tremendous shock. Martin throughout the greater part of his life did not enjoy good health. However, he bore his illness with courage and dignity.

One of a family of twelve children from Claremorris in Co. Mayo,

Martin was born in 1939 on the day the second world war was declared.

Educated in Mayo and Monaghan, he graduated from agriculture college and was employed by the Department of Agriculture, first in Co. Clare and then in Co. Sligo where he worked and remained until the time of his death.

The esteem in which he was held by the agricultural community of Sligo and elsewhere, along with his many neighbours and friends, was indicated by the numbers attending the wake in his home and his funeral requiem and interment.

Martin joined the Amateur Fraternity in the early eighties. With many QSOs, DX and otherwise entered in his logbook none was more cherished than the one logged with Owen Garriott W5LFL aboard the Space Shuttle STS-9 in 1983.

He was a regular participant in all local GI and EI rallies and club activities when health permitted.

He played his part on the national scene when he served as Secretary of the national society IRTS.

He also contributed regularly to the society journal Echo Ireland and was always a thoughtful contributor to discussions during his time as an IRTS committee member.

Martin was a joy to meet and engage in diverse conversations from all aspects of amateur radio, photography, computing, satellite and terrestrial reception right down to local radio, good humour jokes and stories.

His many EI/GI Amateur friends especially in the North West would hold as a privilege to have known him.

They sincerely wish to convey their deepest sympathy to his wife and children.

May he rest in peace.

Willie Long EI6AI



Packet Radio v The Internet

By John Lofthouse EI3DIB

Being what I think is now the last remaining Packet BBS still running in the Republic and also being one of the many who have internet access I decided to make a few comparisons in an effort to see why users are leaving packet in favour of the internet.
To some this may appear to be obvious but stop and think a bit, this is our hobby !!!

I do not have the luxury of a broadband always on line facility so am restricted to dial up at something like 46k at best these days, in other words not all that fast and being on a PAYG basis and with rather low usage I do not spend to much time on line so again it is possible I am missing something, but then again I ask the reader, are you also?

The packet radio system is a 24/7 system and with monitor off costs very little to run so the question is simple, why is it not being used?

First indications were that whatever I may have is also available on the internet if you look for it and I am not able to argue with that point.
My latest PC is running with anti virus, anti spam and spy blocking software to name but a few of the must have utilities if you want to go on line these days.
Packet radio has none of these because it has none of those problems specific to the internet to start with. My 3.2G P4 with all its anti this and that takes an age to boot while the Pentium 166 with BBS is faster to boot by comparison.

So the question then remains as to why it is not being used and if it is still a part of our hobby why is it slowly dying?
It has world wide links just like the internet, mail today can be exchanged with Australia, round trip in a day, so not so slow really.

On reflection and after a few questions it appears that most potential users have heard about it and know all about the personal mail and the bulletin side of the system and quite rightly will tell you how the same is available on the internet only much faster etc.

But for some reason they appear to know nothing about what else is available,

Why?
Automated systems that have appeared over the years will only let you select bulletins of a type and or style to your specific interest. They are not able to make use of the many other facilities that are available because for most it requires the user is connected to the BBS and is actively operating the system real time, so what then is available?

Most readers and users or ex-users will know about L for List and LM or LN for variants on the list, likewise R and RM or RN etc are all normal prompts, but what about all those OTHER Prompts you get at log On ? B-C-D-F-K-L-R-S-TH-W-!-?

The B for bye, L-R and S for send are all used and known about as is K but what about the others then? What is C because it is not Connect as may be expected but Conference!

If more than one person is on at the one time you can link to them and have a round table conference.

D is for DOS, a bit like the old DOS system where you can look at the directories and change to other directories and look in them as well, limited to where the Sysop will permit for obvious security reasons. What you see you can download and there may be plenty to see.
TH is for Themes and is relatively new but is simply a way of looking at the bulletins differently.

Rather than just list everything it lists bulletins within a theme, Amsat and DX for instance can be found under this heading so all bulletins to AMSAT would be listed here.

W is simply for What and will send you a list of the DOS Directories to be found under the D command and is just a fast way of listing what is available. You can also use W (dir) where the (dir) is the directory of interest and it will list the contents for you, any files can be requested using either the YAPP or the 7PLUS Servers.

Text files are of course readable under the DOS facility although the DOS commands are a little different and based more on the original DOS structure so TYPE is used to read a file unlike the READ you may be more used to You must also use the FULL file name including any secondary so BBS.TXT would be requested as TYPE BBS.TXT.

Last but by no means least is the F for Facility command. Here you get a choice of what you want to do, list documentation on things available and this can include documents like conversion data or UK Repeater data etc.

You can look at the BBS statistics and check out any user data the BBS has available.

You can also use the QRA Locator where you can pop in your own data and either get a bearing or a distance calculation or even conversions from one locator type to another. You just enter the data and the system will do the calculation.

The SAT section currently has 51 satellites listed and automatically updates all information from Keplerian data and Amsat files that arrive on the BBS. Text data on each may be available and you can also download data you may be interested in. Given your own location the system will also calculate pass data and in range times for you for any time and or date you may wish. Select the default Ie today and now and it will start to list the specified Sat data, 1 page at a time until you decide to abort, so you can work out just when the ISS may be contactable from your location.

At the start of this I mentioned the fact of no virus activity etc with this system? So may I close by saying that any new user on the system should not be concerned about making a mistake or putting in a wrong entry, the system has been designed in a way that any error will either result in an error prompt or at the very worst will simply disconnect you and you can then re-connect and start over.

Of course all and any files downloaded should be double checked by yourself to ensure they do not contain a virus as the eon a PC can install a virus if it contains one.

All such things on the BBS have been checked but there is no guarantee as users can also upload to the BBS so I can only guarantee that downloading and or reading anything from the BBS will NOT give you a Virus, only if you download and then RUN something is there the potential to get infected.

I try my best and will offer help to anyone who requires it.

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SP EI3DIB is all you need to send me a message.

For those who think it will cost a small fortune, a simple sound card interface using just a few components that can be wired (space wiring) into a 25 pin parallel port plug and with software I can provide for cost of post etc will get you on packet for just a few Euro.

Do have a poke around if you can, my current user list is just 10 and that includes myself.

Sadly it has to be said that any less would make continuing pointless for me and reluctantly I may have to make the decision to close.

The Node also provides for a link into the Cluster network but again this is not being taken advantage of.

John EI3DIB

Sysop of the Tipperary BBS.

Richard Ebbs EI2ID returns to the UK



Richard Ebbs EI2ID who lived in Dungourney Co. Cork has moved back to the UK after a number of years living in EI. Richard had an interest in all things VHF and was an

active radio operator who had many friends in the Cork area.

Richards UK call is G0MIE.

He was not allowed to keep his EI call as he is not now resident here.

We wish Richard and his wife all the best for the future in the UK and hope to hear him on many bands in the years ahead.

VHF Activity Update

October 4 meter activity night

On the 4th of October last the 4 meter activity night was well supported. My location was Keeraunduff Hill, IO53ig, WAI M12 Galway which is 2 miles north of Spiddal, Co. Galway. Elevation of this site is 420 feet overlooking Galway Bay. I was using a Watson 4 meter whip antenna and the rig used was a Philips FM1000 with 25watts.

I worked Hugh EI2HI in West Cork at 2108, a good 5/7 signal through the Cork 4 meter simplex.

At 2120 I worked Eddie EI3FFBin Bansha, Co. Tipperary, also 5/7 through the simplex and 4/1 simplex.

EI7FAB/P (John) Mayo came up on air at 2122. John had a 5/8 signal simplex. He was using an AKD-4001 transceiver and a Watson 4 meter whip antenna.

Others heard on the night included Andy EI5JF from Tipperary and Dave EI7FYB from Dungarvan, Co. Waterford. Andy was using a Philips FM1000 on the night, good signal, but weak audio on my side.

There were a number of other stations on air, call signs not to hand!

The next 4 meter activity night will be held on November 1st. The majority of stations seem to be active between 2100 and 2200. I would be very interested in getting reports from any SWL's, giving location, receiving equipment used & stations heard etc.

6 Metre Beacon Update

EI7BMB Tony, informs me that the UK Six Meter Group has donated a 1/2 wave vertical 2.2Db gain antenna & coaxial cable towards this EI beacon project.

An application for the beacon has been made to ComReg and all await their decision.

Regards,

Joe Fadden EI3IX, I.R.T.S. VHF Manager

Squares Table

Callsign	50 MHz	70 MHz	144 MHz	432 MHz	1296 MHz	Totals
EI5FK	278	0	177	20	0	475
EI2JD	206	3	6	0	0	215
EI3IO	90	19	0	0	0	109
EI7IX	8	0	89	0	0	97
EI8JK	66	0	21	0	0	87
EI3IX	6	1	3	1	0	11
EI7FAB	1	1	1	1	0	4

Pat EI2GHB Wedding

Pat Thompson EI2GHB and Trish Coveney were recently married and the following hams were pictured at the reception held in the Trident Hotel in Kinsale, Co. Cork.

Left to Right:

James EI2IV, Phil VK3ELV, Pat EI2GHB (groom), Willie EI9JM (grooms man) and Maurice EI9FTB.



20th IARU Region 1 Conference

By Sean Nolan EI7CD

On Sunday 11 September, 160 delegates representing fifty six Region 1 Member Societies, the Permanent Working Groups and IARU Headquarters in Connecticut assembled in Davos, Switzerland for the 20th IARU Region 1 Conference.

The Society was represented by Finbarr Buckley EI1CS, Vice President and Sean Nolan EI7CD, Hon. Vice President. IARU International was represented by Larry Price W4RA, President, Tim Ellam VE6SH, Vice President and Dave Sumner K1ZZ, Secretary.

In his opening address, Larry Price W4RA, President IARU emphasised the importance of working together as a unified force at international level to achieve common goals. This collaboration and cooperation was, he stressed, the secret of our success at WRC03 and WRC79 when we respectively gained an extra 100kHz at 7MHz in Regions 1 and 3 and new allocations at 10, 18 and 24 MHz.

Larry went on to remind delegates of the emerging importance of Regional Telecommunications Organisations in the work of the International Telecommunications Union (ITU). He highlighted the increasing influence of the African Telecommunications Union and the League of Arab States and he urged delegates to ensure that there would be strong support for the Amateur Service at WRC07 in all regional telecommunications organisations.

In a presentation on WRC07, it was pointed out that Agenda item 1.13 calls for a review of "the allocations to all services in the HF bands between 4 and 10 MHz". Fortunately, the 7.0 to 7.2 MHz segment settled at WRC03 and which will be an exclusive amateur allocation from 29 March 2009 is excluded from this review.

However, the 100kHz, 7.2 to 7.3 MHz is subject to review and the existing amateur allocations here will have to be protected. This point was reinforced by Valery Timofeev, Director ITU Radiocommunications Bureau in the course of his remarks at the opening ceremony when he said about this review, "The spectrum requirements of HF broadcasting are among the factors to be taken into account.

This emphasises the importance for amateurs to safeguard their interests in allocations in the 7200 – 7300 kHz band, per-



IRTS delegates at the Region 1 conference: Sean EI7CD and Finbarr EI1CS.

haps at the same time providing an opportunity for further harmonisation."

All member Societies must seek to ensure that their Administrations support the retention of this 100kHz as an amateur allocation at least in Region 2.

If this battle is lost, the amateur service's unsatisfied requirement for a worldwide exclusive allocation of 300kHz in the region of 7MHz will not be fulfilled. There is no room for complacency on this point as there are already indications that some interests would wish to see the amateur allocation at 7MHz confined to 7.0 to 7.2 MHz worldwide.

A very interesting power point presentation was given by IARU Vice President Tim Ellam VE6SH on the Future Structure and Role of the IARU. In his presentation, Tim touched briefly on the history of the IARU and on the changing technical, economic, political and regulatory environment in which it must operate. He went on to point out some perceived shortcomings in the existing structure and to outline some ideas to be discussed so that the IARU might better meet the demands that will be placed on it in the future in this changing environment.

The Conference works through four main Committees, one for Finance, one for Organisational and Administrative matters, one for HF and one for VHF/UHF.

Only two of these Committees work simultaneously so that it is just about possible, with early starts and long days, for two delegates to cover the work of the

Conference. Just as an example, on two of the days work commenced at 0830 and finished at about 2200 with lunch and an evening meal being provided each day at the Conference centre.

The main discussions of the Conference takes place in these four Committees which decide on the various agenda items and make recommendations on them to the final plenary meeting where each recommendation is voted on.

Some of the main decisions taken by the Conference were

- A revised system of calculating Member Societies' fees was decided on which will save Societies about 10% of the existing fee. This was possible due to a significant reduction in the expenses of running the Region effected by the present Secretary Don Beattie G3BJ
- Voting procedures were amended so that only those societies who have paid their IARU dues would be eligible to vote
- The process of introducing a more democratic system of appointing the International IARU President by election was commenced at the Conference. The RSGB proposed that the President be elected rather than nominated by the ARRL for ratification (or otherwise) by the Member Societies as at present. They also proposed that the post of Vice Presi-

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dent be replaced by three Vice Presidents, one from each IARU Region. A vacancy for President would then be filled from among the three Vice Presidents by secret ballot of all Member Societies.

We proposed, and it was accepted, that this ballot be through an appropriate system of weighted voting. This is to seek to equalise the voting strength of the three Regions given the imbalance in the number of Member Societies in each (approximately 92 in Region 1 42 in Region 2 and 30 in Region 3). For example, counting a society in Region 3 as 3 votes one in Region 2 as 2.2 votes and one in Region 1 as 1 vote would more or less equalise Regional voting strengths. In any event the matter will have to now go to the other two IARU Regions for consideration.

Information was not available to address a concern which we voiced about the financial implications of this decision for the funding of IARU International. It is, however, a matter that would need to be considered so that a fully informed choice can ultimately be made by all Member Societies.

- The term of office of Executive committee members is to be limited to three terms
- A "Foresight Project" was established to be chaired by Bob Wilson G3PJT to produce proposals for consideration and action on the future direction of amateur radio in the light of the changing technological, commercial and political (regulatory) environment
- A Spectrum Defence Fund was set up to be funded voluntarily by Member Societies and by a restructuring of the Regional Budget
- Band plans were revised so that segments will be designated by signal bandwidth rather than mode. This does not make any dramatic changes to the band plans, which have widespread support, but it makes them more flexible and adaptable in accommodating existing and new modes, especially digital modes
- Meteor scatter QSO's to be subject to the published IARU procedure
- Region 1 Societies in CEPT countries are to seek the implementation of CEPT Footnote EU35 so that weak signal satellite work in the 76



C5 VHF/UHF/Microwave Committee at Davos

Sitting down is long time chairman of the committee Arie Dogterom, PA0EZ, Arie has been a very efficient chairman for many years and stepped down at this conference. Back right is IRTS delegate Finbarr EI1CS.

GHz band would be possible in the segment 75.5 to 76.0 GHz

- Lobby for an exclusive allocation from 10.1 to 10.35 MHz, which is already a part of spectrum policy and for a narrow allocation in the vicinity of 5MHz with the ultimate goal of an allocation of 100kHz in the 5 MHz band.
- A global secondary allocation of 135.7 to 137.8 kHz will be sought in the context of Agenda item 1.15 of WRC07
- The Radio Regulatory Working Group programme with CEPT, including the Entry Level licence was endorsed
- Centres of activity for emergency traffic were decided on arising from the Tampere Conference, attended by John EI2GN, earlier this year (Global 14300kHz, 18160kHz and 21360kHz and Region 1 3760kHz and 7060kHz)
- Beacons are to be discouraged in the 7 and 10 MHz bands
- Until the majority of countries have access to the extended band, 7.1 to 7.2 MHz to be used for CW & SSB

The Conference closed with its final session on Thursday when the recommendations of the four Committees were put to the final Plenary meeting and Croatia was selected as the venue for the next Confer-

ence in 2008.

You may ask is it worth sending delegates to these Conferences?

The answer, if you think about, it has to be yes. These Conferences represent the public face of amateur radio, through the IARU, in its consultative and self-regulatory role. The fact that almost 60% of Region 1 Societies were in attendance at Davos makes a statement about the representative nature of the IARU and lends authority to its activities in the International regulatory arena.

We must be seen to play our part in helping to make that statement. Alternately, think of the message it would send to national administrations and the ITU if only 10% of societies were represented.

You may then say "ah well yes but its costly" and it is. However, the Society has a special fund that was set up about 25 years ago for this purpose and a small part of your subscription each year goes into that fund. The all up cost of sending two delegates to Davos was €3,000. However, it only happens once every three years and so it is €1,000 per year. As we have about 1,000 members, it is a Euro per Member per Year.

A small price I would think to play our part in seeking to maintain the IARU as the worldwide representative body for amateur radio and the radio amateur.

The cost per head would be even less if all of those who should be, were members of their National Society.

EI/SP4Z Breaks EI Single Operator Low Power CQWW CW Record

Wieslaw Kosinski SP4Z tells the story of his trip to Ireland in November 2004 to attempt a new single operator low power EI record in the CQWW CW Contest.

The decision on my CQ WW CW 2004 contest trip to Ireland was settled when I decided to go to Brussels in Belgium for an International Conference of Electrical Engineers (EUREL).

My older brother Wojtek has lived in Maynooth (25km from Dublin) in Ireland for many years. I had never been to Ireland before.

For the contest - the greatest one in the world I chose Single Operator All Band Low Power category. So there was a lot of radio equipment to bring there. Wojtek and our father were going together to Dublin from Poland a week before my business trip to Belgium, so they took a lot of equipment (mast, antenna and station).

The Conference of EUREL in Belgium was on Monday and Tuesday in the week before the contest weekend and I spend a nice weekend in Belgium beforehand. I came from Brussels to Dublin late in the evening on Tuesday to be ready to assemble the contest station on Wednesday morning. My brother welcomed me at the airport and said: "Welcome to Ireland, I just came from Madrid a few minutes ago". 'What a perfectly organised guy he is', I thought. I only had 3 days to the beginning of the contest.

On Wednesday morning with my father who helped me a lot, we began setting up the antenna system. The construction of the Spiderbeam was easy and pleasant. All was prepared very perfectly at home (thanks to Gene SP4JCQ and Chris SP4AQD for their great help during the tests of the antenna and their advice and for Toly SP4CPB who lent me a balun). But the main problem was to put up and down the telescopic mast. It started from a diameter of 70mm down to 30mm. Unfortunately those last two sections were too thin to carry up the rotor and antenna mast. I decided to put up only 5 sections each 1.5m in length. It needed drilling and boring holes. How thoughtful of me to have taken some spare parts like screws and aluminium pipe. We were not in a hurry. All this took a few hours but it got very dark very quickly (winter time in the northern hemisphere). So we finished our work outside and we went to set up the station in the operating

shack. The antenna was 2m above the ground but I could work Americans and Europe on 20m and 40m band. The SWR of the antennas was good on all bands (Con's DF4SA descriptions and information are excellent). Wojtek and his three sons (George, Peter and Luc) and their neighbours were very interested in my very technical hobby (by the way, Wojtek inspired me to this hobby in 1976 in our primary school in Lapy where a club station SP4PBI was located). But he has never been licensed radio amateur. One of the neighbours could not believe to hear a station from PEI (Prince Edward Island in Canada) so loud. His grandparents live there. Who knows when I come to Ireland more often they may become ham radio boys.

Next day (Thursday) I decided to put up the antenna mast with the spiderbeam to check Inverted Vee antennas for 80&160m installed underneath. It was very hard to erect the mast. It has only one point to block each section - fully extended. I could not block them when the mast was in not exactly vertical position. It was all the time sloping around so I needed more people to help. The two of us (me and my father) could not fix the problem. Brother Wojtek and his young boys were away from home. We had to wait.

While I was sitting in the garden drinking coffee and thinking a lot, I decided to take a few more photos of antennas and mast details.

I was thinking how to put up the mast,



when my sister-in-law Rossalyn came back home earlier and found me so frustrated. She said: "Wiesiek, do not be so sad, go to see Maynooth and after that we will drive to pick up the children from school (which is 10km away in Kilcock). I'll show you Ireland a little. It's your first visit. Do you want to spend all the time in the garden?" She did not realise how important for us ham radio is - the contest is coming soon and the antennas are on the ground. But in this situation she was right: the rest of the day was spent with my family. During the drive I remembered one of the lots of nice views she showed me. It was a small wonderful church in an almost empty field where she had married Wojtek a dozen or so years before. I was so fascinated by it I forgot to take any pictures of this.

On Friday morning, Wojtek (I think Rossalyn spoke with him about that earlier - you are a lovely girl of sense - thank you so much) said: "Today I have home office day, I will be free at 10 am". Exactly at that promised time we all looked around: "Yes, we'll do those things with the antenna system in the late afternoon very easily" he said - "Now we can go for a trip to see Dublin and its area first".

It was a fine and warm sunny day. For few hours I forgot about contest, but thinking always if we could managed all the problems later. In Dublin, there we could not see many things - there were no time to do that - but Ireland is wonderful: Large studs with many horses on green fields (in spite of winter time), old

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historical middleage churches, castles and towers, Irish Sea with high tide and wonderful port of Howth, centre of Dublin with old historical places and impressive 128m high stainless spire – a sign of our ages. Many people were in hurry coming for a weekend.

And on the other side Ireland is a high technology country: main Intel Corporation headquarter for Europe, big Hewlett Packard Company for the world (I saw them because they are located close to M4 highway), IBM, Oracle and others. Oh well, now it's time to return to my brother's home.

With 4 more people (Wojtek and his sons - thank you George, Peter and Luc) in big light reflectors during the evening we put up the mast. But we did it many times forgetting some wires or other things. Every one who was holding the rope of the mast had to pay attention to follow our instructions to keep the mast in a vertical position. Now it was time for a late lunch and short sleep before the contest.

Contest operation

At 00:00 UTC (also the same local Irish time) the CQ WW contest began: I started to work on my favourite band - 40m, but I realised that it was not the same band like on my 3 element full size Yagi at home in Poland with a high power station. I was running only 100 watts. I had to work more S & P method instead of running pile-up. I spent 3 hours on 40m with only 100 contacts. The pile-up started on 80m increasing the rate of contacts rapidly. North America was loud (I am almost 1,500 km more to the west than my own QTH – much closer to NA) and stations from there were calling me too. During the next 3 hours – almost total 300 QSO are in the log. Now it was time for top band (160m). Multipliers (new countries) were growing up (VY2NT from Canada was unbelievably strong) but I could not run CQ (calls for all stations) much longer without any answer. Antenna for 160m tuned very narrowly for the IC706mk2g transceiver. Only 20kHz, centering on 1830kHz, did I have full power (I did not use an antenna tuner at all). I came back to 80m for an hour and then to 40m at 08:00. It was close to sunrise in Ireland. I was very surprised 40m again: no USA – only single big gun stations.

At 08:43 with 380 QSOs I went to 20m for the first time with spiderbeam. Just looked around making Brazilian PS2T

first, then CN2R (Marocco) and D4B (Cape Verde) and a few other loud DXs.

I turned the antenna to the east making good EU pile-up. For the next 2 hours I forgot about other bands but the total score increased to 522 QSOs including the only one and last station from Japan JH5PHC during all the contest (the short path to Japan from Ireland is very close to North Pole).

How is 15m? – yes, the Europeans are loud there. It is 10:45 - too early for North America so I was beaming the antenna still to East. First K1IR from USA on the back of the antenna was at 11:19. What to do: turn the spiderbeam to NA and then all Europeans will be back of the antenna or stay to the east? I decided to keep beaming east. But no far East Asia and Pacific came into the log except Alan VK8AV from Australia during the next two hours. The solution was: I came on 15m band too late to work them from that part of the world.

Checking 10m with only a few QSO from selective areas (VK9AA from Cocos-Kelining in the Indian Ocean was a nice surprise) opened for short time and losing a lot of time to do that, I came back on 15m running North America, a pileup now. Of course I tuned left and right the knob of the transceiver to find good double multipliers. At 15:00 I changed the band to 20m with nearly 800 QSO in the log. Not so bad: 53 QSO per hour. 20m was also good for the next 1.5 hours. After that something stopped. 10m was closed, 15m was very hard (but good VP8WWW – Falklands Island and CP6WW – Bolivia QSO) slowly closing down. I felt the aurora effect. Made a few more contacts on 20m and I definitely went to the night bands at 18:18 with the total of 957 QSO.

40m band was fine for 1 hour, running Europe I tried to call many far East stations I heard but no chance. Europe is in the way to reach them. I could see some directivity effects of the rotating dipole on top of the spiderbeam (SU9NC from Egypt with first call in a big pileup).

After a "long" sleep at 06:17, I started the operation from 160m, next 80m, stopped on 40m longer with a good double mult: ZL6QH via long path (we can always make New Zealand from Europe counting on that team). But no other DX logged.



Two hours passed: another 100 QSOs in the log. This time at 08:44 I started to work on 15m counting on Far East. Two hours earlier than yesterday. Bad decision: the band was awful, no Japanese or any other Asians at all. After 20 QSOs I chose 20m for the next 2 hours logging a few more QSOs on 10m in the meantime (e.g. VU2WAP from India for a double mult). It is 10:45 – now 15m is much better: just like the same time on the first day. Trying to find more multipliers on 10m I was there till 14:00 with the score of 1500 QSOs and about 900 kilopoints. The old Irish CQWW all time record in SOAB LP category was beaten – but I have 10 hours to go. Wes: do not slow down! I jumped between 20m and 15m band staying tuned on 20m with a good pileup from North America.

At 19:00 when 20m stayed definitely closed I logged 1726 QSO close to the magic 2000 QSO for a low power operation.

Score is over 1 million points:
All time CQ WW record in SOAB LP for Ireland was broken.



Amateur Radio and the Niemba Ambush (1960)

By Tony Breathnach, EI5EM

In 1960 civil war broke out in the Congo, following independence from Belgium. A UN peace-keeping force was dispatched there, which included a contingent of Irish troops.

Irish Army HQ in the Congo was located in Albertville (now Kalemie in DRC). Two outlying bases were located in Kamina 800 kilometres to the south-west and in Goma 500 kilometres to the north. The radio equipment being used by the Irish army could not operate above 10 MHz. This restriction meant that, while contact could be made between Albertville and the bases, contact with army headquarters back in Dublin was almost impossible.

Terry Tierney, VQ5FS (EI9G), was working in Ginga, Uganda as an engineer on a hydro-electrical project at the time and kept in regular radio contact with Fr. Jim Stone (EI4Q) on 28 MHz. Jim was a Catholic priest in Killester parish in Dublin.

Terry happened to be tuning around the 7 MHz band one day when he heard an Irish accent calling "CQ", using the Curragh Army Radio Club call-sign EI5C. The radio operator was Capt. Brendan Deegan operating from Goma. Terry was surprised to learn that the Irish army hadn't the capability of communicating by radio with Ireland. For several days afterwards, Terry relayed news from home to Capt. Deegan.

Terry was determined to rectify the communications problem, and offered to construct a 28 MHz transmitter for Capt. Deegan. He also offered the use of a suitable BC348 receiver.

Terry had the transmitter built within a few days and delivery was arranged at a place near Kinsoro on the Uganda/Congo border.

The 500 kilometre drive from Ginga to Kinsoro took Terry twelve hours over rugged terrain and through hostile territory, where lawless bands of armed Congolese and mercenaries were operating. He was relieved when at last he could see the lights of Kinsoro in the distance as he arrived at the rendezvous.

After a short while, Terry noticed a white UN lorry approaching flying the Irish

flag. One can only imagine how he felt on seeing the Irish tri-colour flying proudly in the middle of Africa. Captain Deegan introduced himself and his men.

After chatting for some time, Terry explained the setting up and operation of the radio equipment before handing it over to the captain. In addition to receiving the gratitude of the troops, Terry was presented with some Irish biscuits, a supply of tea and some petrol for the long drive back to Ginga.

Dawn was breaking as he reached the safety of his home after a long and arduous journey.

On the following day, Terry made radio contact with Goma to see how things were progressing. The equipment was already installed and working. He arranged a contact for the following morning with EI4Q in Killester on 28 MHz. Goma would not be able to hear Terry on 28 MHz due to being in the skip zone. However, a 7 MHz link between Ginga and Goma would facilitate "local" talkback.

When contact was established between Ginga and Dublin, Terry informed Jim EI4Q that EI5C was on frequency from Goma. EI4Q gave EI5C a call. Two-way contact was established and reception reports exchanged. Capt. Deegan was thrilled by the success of this contact from Goma to Dublin.

Improvements were immediately carried out on the antenna in Goma. The news quickly spread among the Irish troops and the radio room in Goma was packed the next morning when contact was again successfully made with Dublin. Band conditions were excellent and it was over two hours later when the contact was eventually concluded.

It was a great morale booster for the troops to realise that reliable and regular radio communications could be established with their homeland.



Jim Stone's Heathkit Apache transmitter

Jim told a friend, an Irish army officer, about his regular radio contacts with Goma. Gen. Sean McEoin, Chief of Staff of the Irish Army, was informed and expressed an interest in speaking to his UN troops by radio. This was duly arranged, and when the general arrived in Killester, contact had already been established with Goma. Greetings were exchanged and Gen McKeon conversed at length with Colonel Buckley, CO of the 32nd Battalion in the Congo.

During that radio contact, the sad news began to filter through to Goma of an ambush on an Irish army patrol, operating out of Kamina.

The ambush, by Baluba tribesmen, took place at Niemba as the Irish soldiers tried to repair a bridge over the Luweyeye River. Details of the ambush and of the casualties were given to Gen. McKeon over the air. The date of the ambush was 8 November 1960. Nine Irish soldiers were killed in the attack and two survived.

Regular radio contacts between Dublin and Goma continued for some time thereafter, until the army eventually had a permanent telex link installed between HQ in Dublin and the Congo.

However, amateur radio had played its part in filling a telecommunications gap when it was most needed. This was due to the resourcefulness of Terry Tierney VQ5FS, Jim Stone EI4Q and, of course, to Capt. Brendan Deegan, the radio operator in Goma.

Jim Stone's Heathkit Apache transmitter is now on permanent display in the Radio

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Museum at the Martello Tower in Howth. The Apache technical manual, with its pencilled annotations by EI4Q, is also on display there. In contrast to the lightweight miniaturized equipment available today, it took both me and Joe Dillon EI4FV to lift and carry the Apache into the museum. Bear in mind that this was only the transmitter! If anybody knows the whereabouts of the Goma transmitter or of the original BC348 receiver, or any other BC348, the museum would be interested in adding them to the display beside the Apache. The museum website is www.qsl.net/ei5em/museum.html.

I can claim no credit for originality in writing this article. I have simply condensed and edited the original detailed account related by Jim Stone to the late Jimmy Upton EI8Z, many years ago. I am also grateful to Joe, EI4FV, for passing on a copy of Jimmy Upton's original document.

My thanks also go to Colm Ardiffe (EI3H) for maintaining the Apache in the past and for storing it safely after Jim Stone's death. It has now found a suitable home in Howth, not too far away from Killester.

The forty-fifth anniversary of the Niemba ambush takes place on 8th November this year (2005).

Birds

The photograph of birds on beams in the last issue generated a good response.

Thanks to all who put forward ideas and suggestions and especially to Rob Mannion EI5IW/G3FXD for the copy of the bird scarer article from Practical Wireless.

Amongst the suggestions were rotating the beam regularly when the birds were on board, devising a means of automatically giving the beams a turn at peak times, using various types of grease on the elements, using dummy hawks etc and hanging up a few dead birds as a deterrent.

All I have tried so far is rotating the beam and it has a limited effect. We will try some of the other suggestions in due course

EJ0GI - IOTA on Inisheer 2005

For the second year running an all-Ireland 18-man team revisited Inisheer Island (EU-006) to take part in the 2005 IOTA Contest under the callsign EJ0GI.

The group entered the high-powered multi-op section with a vast improvement on previous years with a best ever score.

This was the fourth successive year for the group to enter this contest. We operated from the only school house on the island and the venue proved to be an ideal location. Every thanks is due to the Principal for all his co-operation, assistance and hospitality. Thanks is also due to the owners of only hostel on the Island who accommodated the group very well. The local population was also very hospitable and showed a keen interest in the operation and we provided a colour piece regarding Amateur Radio and IOTA for their inter-island magazine and for the RTE maritime program "Seascapes" which was broadcast on August 25th.

The whole team had a wonderful time and the whole operation was a resounding success. So all you big guns out there *Beware!*

Jim EI4HH

South Dublin Radio Club.



Top picture shows the group after the contest.
Bottom left : Paul EI2GSB and Daniel EI9FHB.
Bottom right: Dave GI8SKN and Dave EI3IO.

Theory Examination

Arrangements have now been put in place for the next Radio Theory Examination run under the auspices of the IRTS. This examination, which will be the first in multiple-choice format, will take place in the ComReg premises in Irish Life Centre, Lr. Abbey St., Dublin 1 on Wednesday, 18th January 2006.

Details of the examination format, together with a sample paper, may be obtained from Sean Donelan EI4GK at QTHR. These details and the sample paper are now available on the IRTS website. (www.irts.ie)

Students and instructors will appreciate that although the structure of the examination has changed, its content has not, as it continues to be governed by the HAREC Syllabus.

With most countries now using HAREC and multiple-choice examinations, there is a much greater variety of sample questions and teaching material available to assist the student's preparation.

See pages 18 and 19 in this issue for a more detailed look at the exam structure.

In the meantime those wishing to sit the January examination should **GET WORKING NOW!!**

Tarbert Lighthouse EI4TLH Activated by Limerick Radio Club August 20/21st

Limerick Radio Club members were in action at Tarbert Lighthouse for the Lighthouse Weekend on August 20/21st.

Weather conditions were ideal on the Saturday for setting up station at the site but on Sunday it was a different story with heavy rain all day.

As usual it cleared up when all the gear was packed away.

Club members who attended were John EI6IW, Brendan EI0CZ, John EI5F0B, Brian EI9AL, Mike EI2IX, Dennis EI6IF and new licensee Jim EI3GDB.

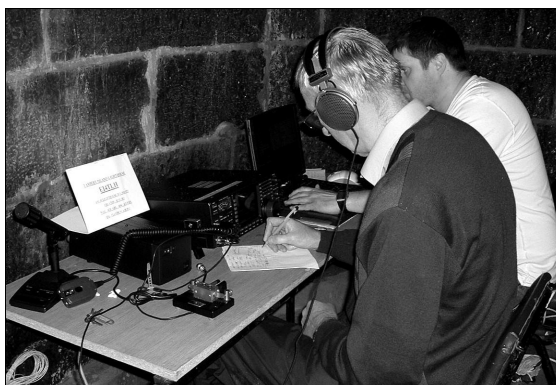
Operations commenced at lunchtime on Saturday and continued until lunchtime Sunday.

Although radio conditions were not the greatest over the weekend almost 500 contacts were made both on CW and SSB.

Everybody taking part in the event enjoyed the weekend and is looking forward to next year.

Top : Tarbert Lighthouse with the car ferry in the background.
Middle: Brendan EI0CZ on CW with John EI5F0B on computer logging.

Bottom: Brian EI9AL on SSB.



Charles Carpenter EI4IS/N6CFQ returns to USA



A very pleasant function was held in the Collins Traditional Bar in Carrigaline on Tuesday October 5th where Charles "Chuck" EI4IS and his XYL June were presented with tokens of appreciation for their contribution to ham radio in Cork since 1998.

Charles, in his short time here, made a big contribution to the workings of Cork Radio Club where he served as QSL and Awards Manager. He was always involved in any club activities such as field days etc. He was also very active on the HF bands.

Charles and June settled in Crosshaven in a bungalow overlooking Cork Harbour and had to go all the way to An Bord Pleanála to get planning permission for his tower and Cushcraft X7 HF beam.

At one stage it was pointed out by the objector that he was operating in a harbour area, contrary to regulations, and he was asked by the regulator to cease all transmissions and return his licence. This was sorted by the national society in a very short time.

Charles was born in Honolulu in Hawaii in 1933 and left home at 17 to join the US Coastguard. He later joined the military and spent all his working life in the US Air Force and Navy.

He served in Derry between 1962 and 1964 where he met June, a Belfast native, and they married in 1964. After leaving Ireland, he served in many locations around the world before retiring in 1974 as a Chief Petty Officer.

Charles and June have a daughter Jacqueline, a son Glenn and one grandson. They moved to Lititz in Pennsylvania on Friday October 7th where they will be close to their daughter and grandson. We will them well in their new home and expect to regularly hear N6CFQ on the HF bands.

IRTS Submission to ComReg Consultation Paper 05/58

Review of fees applicable to rights of use for radio frequencies

The following is the submission made by the Irish Radio Transmitters Society to the ComReg consultation document 05/58 dealing with the review of fees applicable to rights of use for radio frequencies.

Reference: Submission re ComReg 05/58

IRTS has considered the proposals made in the Consultation Paper 58/05 and is pleased to respond with the following submissions and suggestions.

Question 23

IRTS has no objection in principle to the concept of a life-time licence. The fact that such a licence will be made available to existing Experimenters for a once-off fee of €30 is considered reasonable.

The Society feels that the proposed once-off €100 fee for new licences is excessive and might be a barrier for new entrants to the hobby. It suggests as an alternative a once-off fee of €50. If this is not possible, we believe that students and those on Unemployment and Disability Benefit should be subject to a reduced fee.

The proposal on the “use of extension bands and modes of emission” is confusing, to say the least. Following discussion with a ComReg official, IRTS has been assured that the proposal involves a once-off payment of €30 for life-time usage of all the existing extension bands and modes. On the understanding that this is correct, will the addition of further extension bands and/or modes in the future give rise to additional once-off fees? It seems reasonable to assume that once paid such a fee would cover any future extensions. Otherwise, it could be claimed that those paying prior to a future extension were being discriminated against vis a vis those paying afterwards.

The “extension bands and modes of emission” referred to in the Consultation Paper appear to equate to those that currently require individual application and authorisation. The Paper now suggests that these Bands and Modes be subject to “notification and payment”. What has happened to “authorisation”? What is the purpose of “notification” if “authorisation” is no longer necessary? Given that ComReg is seeking a reduction in its administrative burden, and that Ofcom and the FCC do not seek “authorisation”, “notification” or indeed “payment” for extension bands or modes, surely it makes sense for ComReg to take a similar approach. These bands and modes tend to be used by a minority of Experimenters, IRTS is not aware of any current problems in their usage, and to charge an additional fee in these circumstances is regarded as invidious.

The Society is strongly of the view that a once-off fee for a life-time Experimenter licence should cover all bands and modes available to the Experimenter in Ireland and, accordingly rejects the suggestion that extension bands and modes be subject to either notification or additional fees.

The Society is extremely anxious that an accurate and up-to-date database of active Experimenters’ licences be maintained. Traditionally, IRTS has cooperated with ComReg and previous regulators in maintaining this database. It will be happy to continue to provide this cooperation. The Society is strongly in

favour of the proposal to obtain confirmation of licence details once every five years. How this should be done is another matter and one that IRTS will be happy to discuss with ComReg in due course.

The suggestion of a fee of €30 in respect of the upgrading of an Experimenter’s licence from Class 2 to Class 1 is regarded as reasonable. A similar fee in respect of the establishment of a Special Event Station is also regarded as reasonable. However, where a Special Event Station using the same call-sign is activated on a number of occasions, e.g. an annual Marconi Day Station, it should be subject to the fee on the first occasion only.

Question 24

The implementation of CEPT Recommendation T/R 61-01 in Ireland and elsewhere has removed, to a large extent, the need to issue Visitors Licences. Amateurs and Experimenters from countries that have implemented T/R 61-01 may now operate freely in Ireland using the call-sign EI/own call/p or /m and the issue of Visitors Licences does not arise in these circumstances. The issue of such Licences should only arise when visitors come here from countries that have not implemented T/R 60-01, or when visitors who, for whatever reason, specifically request an Irish call-sign. In these circumstances the IRTS is in favour of both the fee and time-limit proposed, but believes that a subsequent re-issue of that Licence with the same call-sign to the same individual(s) should not attract a further fee.

Question 25

The IRTS submissions on Questions 23 and 24 have made a number of suggestions on the detail of the matters covered in Consultation Paper 05/58. The Society has no alternative proposals that it wishes to put forward except that in the context of promoting the optimal use of the radio spectrum (Section 4) the educational and self-training aspects of Experimental Radio should be among the Societal considerations mentioned.

Conclusion

The sections in the Paper dealing with Ship’s Radio and Aircraft Radio refer to the fact that ComReg is required to comply with International obligations and an Internationally harmonised spectrum. This is also the case with Experimental/Amateur Radio. No similar mention is made in the section dealing with Experimenters. We presume that this is an oversight.

IRTS would like to see the fact that Experimental/Amateur Radio is subject to national and international regulation, including frequency allocations which are largely harmonised worldwide by the International Telecommunications Union, mentioned in future references to this activity.

Finally, it is assumed that, in the light of whatever proposals are ultimately adopted by ComReg, it is intended to amend the Wireless Telegraphy (Experimenter’s Licence) Regulations, 2002 in an appropriate manner.

Seán Donelan
President IRTS



APRS - A More Indept Look with John Ronan EI7IG

Last time we went through the basics of APRS[1] and how it works, now lets take a look at some of the more advanced features.

APRS & IRLP

As anyone can write software to interact with the APRS system someone wrote a piece of software that will send a status message of any IRLP node out onto the APRS system for anyone to pick up. EI8JA and I integrated this software into the IRLP node, and then I configured the APRS Internet Gateway software to broadcast this information out on the RF. This would be of most use to a visitor to the area, unaware of the existence of the IRLP node, yet having APRS capability, would be informed of the frequency, offset and status of the node.

Voice Alert

Let us briefly return to the idea of "Voice Alert"[2]. I mentioned before that 100Hz is most commonly used in the USA. It seems that a CTCSS tone 136.5Hz was previously recommended for use in Europe. I have set a 'Bulletin' to be broadcast from EI3RCW-2 once every few hours to inform mobile stations of this.

What started Voice Alert was the frustration of driving down the road, out in the middle of nowhere and seeing a passing APRS tracker and having no means whatsoever to contact him/her. Voice Alert means that you do not turn the volume on the radio down, but leave it up and then set a 136.5Hz CTCSS tone to mute the speaker. This way you will not hear any packets, but anyone can call you by voice by setting a matching CTCSS transmit tone, then you can both QSY for your chat, and when finished you can return to your APRS configuration. This really only applies to mobile stations as a fixed station transmitting a 136Hz tone would cause serious annoyance to every mobile station within range.

This is very useful in the Kenwood TM-D700E as it allows the otherwise 'wasted' (on APRS) A side of the radio to function as almost a 'pager'. It also allows an otherwise dedicated mobile 'tracker' to have a function as a 'pager' almost. If you have a modern mobile rig capable of CTCSS decoding, why not put 144.8 with

a 136.5Hz CtCSS tone in a memory channel. You might come across someone else on the road and it could help shorten the journey for both of you.

Traffic Reporting

This feature is documented in [3]. It allows you to place an object on the APRS system to alert other drivers of traffic problems. This really only applies to the Kenwood APRS radios (would be possible with tinytracker/opentracker also). Simply put, you change your callsign to TRAFFC (or some other name) and then send a few packets to let others know the position of the object (note your callsign has to appear in the packet status text in order to identify the sending station). In the kenwood radios, this configuration can easily be saved to a memory for quick retrieval.

APRS Messaging

Along with being able to send position updates and status messages, its possible to exchange short messages with other suitably equipped stations. This would include the Kenwood TM-D700E, TH-D7E, and pretty much all APRS Software applications. With the use of the APRS-IS[4], this effectively means that one can exchange a short message with an APRS user anywhere in the world. Some enterprising folk have built on top of APRS messaging some very interesting features.

DIGI_NED Overview

DIGI_NED[5] is a very powerful, open source based, software digipeater (Digipeater from the Netherlands). As well as supporting all the latest digipeater functionality it also has several more advanced features which are of interest including:

- Can act as a "tiny-web-server" with configurable messages and pinpointing of interesting locations in the area
- Generates DX messages and keeps DX lists for directly heard stations
Generates telemetry messages, input via a LPT(parallel) port
- Remote control output via LPT port
Satellite tracking activated by queries, transmits the requested satellites by means of so called Objects, displays when the satellite raises above the horizon or when in view shows the bearing and azimuth.

- Ability to send data recieved over a serial line from a GPS, weatherstation or other serial device. The data is sent without modification.

This makes it a very powerful piece of software as it exploits APRS messaging for increased functionality. Currently the WIT Amateur Radio Society don't have anything hooked up for remote control, though one thing that immediately springs to mind was remote reboot of the node itself (in case of software hang) or remote power switches for any other device in the shack.

Pretty much all of the information in these sections comes from the DIGI_NED Manual.

Advanced Messaging - Tiny-Web-Pages

As a APRS user you can ask DIGI_NED (EI3RCW-2) some questions through APRS messages. This is similar functionality as the Tiny-Web-Pages suggested by Bob Bruninga, WB4APR.

In DIGI_NED the query mechanism works with normal standardised APRS messages. To start with DIGI_NED responds to the ?APRS? broadcast message; DIGI_NED will transmit all its beacons. All other messages must be addressed to DIGI_NED (EI3RCW-2). Most of the responses have to be acknowledged by the receiver. DIGI_NED repeats responses up to 10 times, doubling the interval at each attempt. Of course these retransmissions cease when a acknowledgment has been received.

The following are some commands are recognized by DIGI_NED:

- ?help - shows a short overview of all commands
- ?id - shows the own call and the call of the DIGI_NED owner
- ?ver - shows version and date and time of compilation
- ?up - shows date and time of the last restart
- ?aprsd - shows directly heard stations, maximal 5, no ack
- ?mheard - shows help for the mheard command
- ?mheard 1 - shows heard stations on port 1
- ?mheard ei7ig-1 - shows when ei7ig was

last heard, with port number
 ?mh... - just like mheard, only shorter
 ?dx - shows help for the dx command
 ?dx 1 - shows best dx on port 1, all history, last 24h and last hour
 ?dx gw6teo - shows distance and bearing to gw6two
 ?ping? - shows the path of the requester to the digipeater, no ack
 ?aprsm - retransmits all unacknowledged messages for the requester
 ?aprst - same as ?ping?
 ?aprs - makes DIGI_NED send all frames specified with the beacon variable

Note that some commands cause beacon transmissions or transmission of object data and item locations instead of a return message. Commands like "?aprsm" do not return anything if there are no pending messages for you. "?ping" and "?aprst" send messages which do not need to be acknowledged. If reception fails you will not see an answer either.

A specific command from a user is only accepted once in 900 (default) seconds. When a user sends the same command within this time again then DIGI_NED will not respond, only acknowledge the message.

This means for example that a user cannot send two "?info" commands to DIGI_NED within this time, on the second command DIGI_NED will not respond and only acknowledge the message. If the user tries the "?info" command again after 900 seconds then the user will get a normal response on the "?info" command. After sending a command a user can send any other command without any problems. The reason for this behavior is to avoid problems when two auto-responding systems are starting to respond to each other, this will continue forever if nothing is done about it, hence the time limit.

DX Functions

DIGI_NED has a DX function build in. First of all you can get distance information through queries. This works with the command ?DX. It works like ?MH - with port number or callsign. It uses the entries in the MHEARD list, so when the MHEARD list is small the DX will also not give much.

DX with port number 1 (only one port on EI3RCW-2) returns three messages;

- Distance to the best DX station with callsign, and the callsign of the second best DX station

- Distance to the best DX station with callsign, and the callsign of the second best DX station heard in the last 24 hours
- Distance to the best DX station with callsign, and the callsign of the second best DX station heard in the last hour

If there is no second best DX station then only one call is shown.

When a station is received which is the 'best DX' over a period of time then it will be announced by means of a DX bulletin which can be caught by a TH-D7 or TM-D700 radio for example. There is a threshold value defined in the configuration file, which specifies the minimum distance for DX. I have this currently set at 100km. Distances below this value are never considered DX.

Even in a AX25 environment where transmission failures don't exist. It is possible to have errors in the DIGI_NED DX-list. Stations that are local can appear as thousands of kilometers away due to incorrect position information.

Satellite Tracking

Satellite tracking was donated to the DIGI_NED project by Alex Krist, KG4ECV. Alex presented his implementation of satellite tracking in DIGI_NED at the Charleston, SC Hamfest February 3, 2001. Most of the information in this section is taken from his documentation.

The objective of the Satellite Tracking module in DIGI_NED is to give APRS users a tool to track satellites on APRS without having to invest time and/or money in satellite tracking software. APRS users can use their APRS client software to obtain satellite-tracking information. The only requirement on the client side is that the APRS client must be able to send regular APRS messages.

To minimize channel load, the module has been implemented in such a way that tracking is only done on demand. No bandwidth is wasted by loading the channel with information that no one requested (Currently have EI3RCW-2 configured to 'automatically' track AO-51, ISS, VO-52, AO-16 and AO-27).

The tracking module has three main functions. These are,

- Satellite Inquiry,
- Satellite Tracking

- Updating of the Satellite Information Database.

Satellite Inquiry

An APRS user can ask DIGI_NED for information about a particular satellite by sending a message query to EI3RCW-2. The satellite-tracking module in DIGI_NED uses the 4 position Amsat designator to specify satellites (i.e. Sunsat is so35). Such a query could look like:

sat ao40

Upon reception of this message, DIGI_NED will send back a message informing the user whether or not the satellite is in range, and an object containing information about the satellite. This object will be displayed by the APRS client software on a map. The status text of the object will contain AOS (Acquisition Of Signal) information if the satellite is not in range. For example:

AOS@3-2 12:00 LOC

This means that the next pass will be at 12 noon on February third, local time. The time can also be indicated in UTC, and is configurable by the digi owner. If the satellite is in range, the status text will contain information necessary to track the satellite.

For example:

U145.823 7D435.398 1 E71 A123 MB
 This status text informs the user of the doppler-corrected uplink and downlink frequencies (U145.823 D435.398), the elevation angle (E71), the azimuth (A123) and in which mode the satellite is operating (MB, Mode B). The extra 7 and 1 in the status text are for display purposes only on a Kenwood TH-D7A(G)/E. This allows for display of elevation and azimuth together on the first screen of the object information display on this particular radio. In case the satellite does not exist or if the query is not correctly formulated, DIGI_NED will send an appropriate error message back to the APRS user.

Satellite Tracking

Satellite Tracking is actually very similar to Satellite Inquiry. An example of a tracking query is:

trk ao40

The main difference between inquiry and tracking is that after sending the initial in

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range/out of range message and initial object, DIGI_NED will be put in tracking mode. This means that DIGI_NED will continuously transmit objects with updated satellite information up to a maximum allowed time set by the digi owner. The interval between the transmission of objects depends on whether or not the satellite is in range. If the satellite is out of range, an object is only transmitted every 15 minutes.

As soon as the satellite comes in range DIGI_NED will transmit a new object every minute. When the satellite disappears below the horizon again, DIGI_NED will resume transmitting objects at the long interval (15 mins). These intervals are configurable. The information in the status text of the object changes dynamically also. While the satellite is out of range it will contain AOS information, and tracking information when the satellite is in range.

Updating Satellite Information

In order for Satellite Inquiry and Satellite Tracking to be meaningful, the satellite database containing the kepler elements of each satellite needs to stay current. This I do roughly once a month.

APRS Email

APRS Email has been around a while, Keith Sproul WU2Z has a server that will accept any APRS message that has its destination set to "EMAIL" and with the recipient's email address as the first "word" of the message. You may only send one line messages (of 67 characters maximum).

javAPRSEmail is new and was written by Pete, AE5PL, to provide the amateur radio APRS community a simple, but effective, email server for APRS-IS. It provides a multi-platform application tuned to present cleanly formatted packets to the APRS-IS feed and to the Internet email system. This has been deployed on the node in Waterford I.T. as EI3RCW-EM

As well as supporting the standard EMAIL method of having the email address as the first word, javAPRSEmail also supports callsign specific shortcuts.

For instance, if I send a message to EI3RCW-EM like so

me johnronan@jronan.com

then I can use "me" as a shortcut, in place of my full email address, from any of my stations. i.e.

I then send a message to EI3RCW-EM like so

me This is a test

This will send me an email.
I can list all my shortcuts by sending

me l

Upper or lower case L is fine. This will cause an email with all of my shortcuts

To remove the "me" shortcut I would send

me r

Shortcuts are associated with the callsign of each amateur, each can have their own shortcuts and they are case sensitive. Please only include use alphanumerics.

Now, the cool thing is that this is bi-directional. Yes, you can now receive emails direct to your radio ("Whats this got to do with radio?" I hear someone cry). Once you have a shortcut set up. This person can also send you emails to your radio.

I have configured an email address on ei3rcw.wit.ie that all emails are sent from and received into.

Every 5 minutes the javAPRSEmail server checks this mailbox for emails, checks that the sender is authorised, and if they are, it will attempt to send them to the user

As an example, I send an email to

aprsmail@ei3rcw.wit.ie

In the Subject Field, I put the destination callsign and the message i.e.

EI7IG-9: this is a test message

In the body of the email then I have to put my userid i.e

userid:me: < - This is the authenticator, the

server checks this against the "from" address in the email against the previously stored shortcut. If they do not correspond, the email is rejected.

If they do, the email is queued for delivery, and when it is finally delivered you will receive back a confirmation message to say that it was delivered.

Conclusion

That covers most of it I think, if you have any questions feel free to give me a shout on the SEARG Repeater Network if you hear me on, drop me a packet message at EI3DIB's BBS or drop me an email jronan at tssg dot org.

Many thanks to the various Departments in WIT for helping me get it all set up. APRS is a registered trademark of Bob Bruninga, WB4APR.

Now, where is my Morse key?

References

- [1] Automatic Packet/Position Reporting System, <http://web.usna.navy.mil/~bruninga/APRS-docs/APRS.TXT>
- [2] Voice Alert, <http://nwp.ampr2.net/nwaps/VoiceAlert>
- [3] GREAT APRS SETUPS FOR THE TM-D700 MOBILE <http://web.usna.navy.mil/~bruninga/d700-faq.txt>, 6 June 2005
- [4] Automatic Packet Reporting System - Internet Service, <http://www.aprs-is.net>
- [5] The DIGI-NED owner manual, http://www.qsl.net/digi_ned/html/doc/d_n-owner-manual/d_n-owner-manual.htm
- [6] APRS Email, <http://www.aprs-is.net/email.htm>



EI9N in his shack in 1939

SSB Field Day 2005

Garbally College, Ballinasloe, Co. Galway

SSB Field Day, held over the weekend of September 3/4th, attracted five teams competing in the restricted section on the grounds of Garbally College in Ballinasloe, County Galway.

Weather conditions were excellent for the weekend, as the rain, which hit the south of the country, stayed away and enabled all the tents to be packed away dry. Band conditions however, were not so good and DX contacts were few and far between.

The battle of Ballinasloe developed into a two horse race between the local Shannon Basin Club who are the current title-holders and the more experienced Dalkey Island team from Dublin. We will have to await the log checking to find out the final outcome.

There were three beautiful Dublin Crystal trophies, sponsored by the Dalkey Island group, on offer to the teams at Ballinasloe.

The best hourly rate trophy went to the Dalkey Island team, the best HF DX went to the Shannon Basin Club and the best LF DX was won by the Galway Radio Experimenters Club.

The other participants at Garbally College were EI7M/P operated by Dave EI4BZ and Paul EI6FE while Joe EI7GY/P as usual operated as a single operator. Thanks to Garbally College for the outstanding facilities.

The social side of the weekend kicked off on Friday night with a dinner in the local hotel and on Saturday night, the now well-established barbeque was hosted by the local club with chef, Tony EI3HA again producing an excellent and varied menu.

Other entrants

Cork Radio Club operated from their usual site in Glanmire in the restricted section using the call EI1C/P while the Tipperary Club were active also in the restricted section from a site in Co. Kilkeny.

The crew at EI9E/P combined the IARU Region 1 VHF contest with the HF field day and operated from Co. Wexford.



Kieran EI4FFB and Gary EI5FUB



Paul EI6FE operating EI7M/P



Paul EI2CA presenting the Dublin Crystal trophies for the on site competition

Top: Enda EI2II (Galway) best LF DX.
Centre: Tony EI6EW (Dalkey) for best hourly rate.
Bottom Noel EI6HW (Shannon Basin) for best HF DX.



Niall EI4CF and Francis EI6IC both staff members at Garbally College



Enda Broderick EI2II standing guard while Kieran EI4FFB operates at the Galway radio Experimenters station



Tony EI3HA, a member of the Shannon Basin Group who produced another wonderful array of food for the Barbeque on the Saturday night.

EXAMINATION FOR THE RADIO EXPERIMENTER'S LICENCE

Introduction

In May of 2005 an agreement was concluded between the Commission for Communications Regulation (ComReg) and the Irish Radio Transmitters' Society (IRTS) under which IRTS became responsible for setting, organising and correcting the examination for an Experimenter's Licence.

Examination papers are approved by ComReg and the results are forwarded by the IRTS to ComReg for transmission to the candidates concerned.

Syllabus

The syllabus for the examination complies with the standard outlined in Electronic Communications Committee (ECC) Recommendation T/R 61-02, Harmonised Amateur Radio Examination Certificate (HAREC).

A copy of the syllabus, extracted from the ComReg document, Radio Experimenter Licence – Guidance Notes, Document 02/05 R5, is attached at Appendix A. The full HAREC syllabus is at Annex 6 to Recommendation T/R 61-02 E and may be downloaded from <http://www.ero.dk/doc98/official/word/tr6102e.doc>

Examination

The examination comprises a multiple choice question paper with 60 questions and the time allowed is 2 hours.

Four possible answers are shown for each question, only one of which is correct.

Candidates must decide which of the alternatives is correct and place a tick in the appropriate box on the answer sheet. There may be other possible answers to some questions; however, the choice of the correct answer from the options given is required. The examination is designed to ensure that candidates are competent in areas specified in the HAREC syllabus.

The pass mark is 60% and a pass is required in each of the three main sections of the paper A, B and C.

The three main sections of the paper are divided into the subsections shown below with the number of questions in each main section and subsection being as indicated.

Section A - Elementary Theory of Radiocommunications (35 Questions)

- Electrical and Electronic Principles and Circuits – 12 Questions
- Transmitters and Receivers – 10 Questions
- Feeders and Antennas – 5 Questions
- Propagation – 4 Questions
- Measurements – 4 Questions

Section B - National and International Rules and Operating Procedures (14 Questions)

- Licensing Conditions – 7 Questions
- Operating Rules and Procedures – 7 Questions

Section C - Safety and Electromagnetic Compatibility (11 Questions)

- Electromagnetic Compatibility – 4 Questions
- Transmitter Interference – 4 Questions
- Safety – 3 Questions

Licensing Conditions

Experimenter Licences are issued under the Wireless Telegraphy (Experimenter's Licence) Regulations, 2002 (Statutory Instrument Number – SI No 450 of 2002).

A copy can be purchased from the Government Publications Sale Office, Sun Alliance House, Molesworth Street, Dublin 2; Telephone 01-6613111 or it may be downloaded from the website of the Office of the Attorney General at <http://www.attorneygeneral.ie>

You should select >Irish Statute Book >Irish Statute Book 1922 – 2003 >Statutory Instruments 1922 – 2003 >Statutory Instruments 1948 – 2003. Click on the year 2002 and the Statutory Instruments are in numerical order and may be printed off.

Intending candidates are advised to be familiar with these Regulations and with the following ComReg documents

- Radio Experimenter Licence – Guidance Notes. Document 02/05 R5
 - Particulars of Experimenter's Station. Document 02/77 R3
- These may be downloaded from <http://www.comreg.ie> >Licensing – Radiocommunications >Experimenters

Syllabus for Radio Experimenter's Examination

This syllabus complies with the conditions of CEPT Recommendation T/R 61-02

"Harmonised Amateur Radio Examination Certificate"

1. Electricity and Magnetism

D.C.

The elementary theory of electricity; conductors and insulators; units including power; Ohm's Law; resistances in series and parallel.

Magnetic fields, permanent magnets and electro-magnets and their uses in radio.

Self and mutual inductance; types of inductances used in receiving and transmitting circuits; capacitance; condensers in series and parallel; construction of different type of capacitors.

A.C.

Alternating currents; series parallel A.C. circuits incorporating inductance, capacitance and resistance; impedance; resonance; acceptor and rejector circuits; coupled circuits. Nonsinusoidal waveforms.

2. Radio Principles (Elementary Treatment Only)

Sources of Electricity, Transformers (theory applications and use).

Radio waves/electromagnetic fields/wavelength frequency, velocity, nature and propagation of radio waves; fading and its connection with frequency, length of path.

3. Thermionic Valves and Circuits

Construction of valves; thermionic emission; principles and characteristics of diode and triode valves; multi-electrode valves.

Use of valves; amplification, oscillation, frequency changing; signal detection. Power packs for H.T. supply; smoothing. Heat dissipation.

4. Transistor Circuits

Elementary theory of transistors; characteristics of transistors; amplification oscillation, detection, frequency-changing etc.

5. Radio Receivers

The essentials of a receiver; typical receivers; principles and operation of TRF, superheterodyne and VHF receivers; CW reception; interference caused by receivers; reception of SSB and FM; receiver characteristics.

6. Low-Power Transmitters

Oscillator circuits; frequency stability; use of quartz crystal to control oscillators; frequency multipliers; power amplifiers; VHF techniques; methods of modulation and keying, including SSB and FM Phase locked loop. Transmitter specifications. Avoidance of harmonic radiation and interference by shock excitation; use of key-click filters and other means of preventing spurious emissions. Dangers of over-modulation. Use of various devices for reducing interference with nearby broadcast receivers.

7. Aerials

Simple types of receiving and transmitting aerials; transmission lines; simple directional aerials; VHF aerials and feeders; aerial couplings to lines and transmitters; impedance matching.

8. Measurements

Measurements of frequency and simple frequency meters (including crystal type); artificial aerials and their use for lining-up transmitters; measurement of anode current and voltage. Use of cathode ray oscilloscope for checking and monitoring transmitter output, calculating power input to final stage, calculating PEP.

9. Licence Conditions and Operating Procedures

(i) Electrical Safety; High voltages/mains supply; lightning, electric shock; safety precautions.

(ii) Conditions laid down by the Commission for Communications Regulation for experimenter's transmitting licences covering power and frequencies, frequency control and measurement, sending periods, avoidance of interference to other stations, log of sending periods, and use of call-signs.

(iii) a) Phonetic Alphabet

A = Alpha	J = Juliet	S = Sierra
B = Bravo	K = Kilo	T = Tango
C = Charlie	L = Lima	U = Uniform
D = Delta	M = Mike	V = Victor
E = Echo	N = November	W = Whiskey
F = Foxtrot	O = Oscar	X = X-ray
G = Golf	P = Papa	Y = Yankee
H = Hotel	Q = Quebec	Z = Zulu
I = India	R = Romeo	

(iii) b) Examples of Q-Codes

Code	Question	Answer
QRK	What is the intelligibility of my signals?	The intelligibility of your signal is _____
QRM	Are you being interfered with?	I am being interfered with
QRN	Are you troubled by static?	I am troubled by static
QRO	Shall I increase transmitter power?	

QRP	Increase transmitter power
	Shall I decrease transmitter power?
QRS	Decrease transmitter power
	Shall I send more slowly?
	Send more slowly
QRT	Shall I stop sending?
	Stop sending
QRZ	Who is calling me?
	You are being called by _____
QRV	Are you ready?
	I am ready
QSB	Are my signals fading?
	Your signals are fading
QSL	Can you acknowledge receipt?
	I am acknowledging receipt
QSO	Can you communicate with _____ direct
	I can communicate with _____ direct
QSY	Shall I change to transmission on another frequency?
	Change to transmission on another frequency
QRX	When will you call me again?
	I will call you again at _____ hours on _____ (or MHz)
QTH	What is your position in latitude and longitude? (or according to any other indication)
	My position is _____ latitude _____ longitude (or according to any other indication)

(iii) c) Operational Abbreviations as Used in the Amateur Service

AR	End of transmission
BK	Signal used to interrupt a transmission in progress
CQ	General call to all stations
CW	Continuous wave
DE	From, used to separate the call sign of the station called from that of the calling station
K	Invitation to transmit
MSG	Message
PSE	Please
RST	Readability, signal-strength, tone-report
R	Received
RX	Receiver
TX	Transmitter
UR	Your
VA	end of work

(iv) International Distress Signs, Emergency Traffic and Natural Disaster Communication

- Distress signals:
- Radiotelegraph . . . - - - . . . [SOS]
- Radiotelephone "MAYDAY"
- Resolution No. 640 of the Radio Regulations [ITU]
- International use of the amateur station in the event of national disasters
- Frequency bands allocated to the amateur service

(v) Call Signs

- Identification of the amateur station
- Use of the call signs
- Composition of call signs
- National prefixes

(vi) IARU Band Plans

- IARU band plans
- Purposes
- National and International Regulations relevant to the Ama-

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teur Radio and Radio Amateur Satellite Service

(vii) ITU Radio Regulations

- Definition of amateur and amateur satellite service
- Definition of an amateur station
- Article 32 of the Radio Regulations [ITU]
- Amateur frequency bands
- Status
- ITU Radio Regions

(viii) CEPT Regulations

- Recommendation T/R 61-01 E
- Temporary use of amateur stations in CEPT countries

10. Morse Code Examination

(required for a CEPT Class 1 licence only)

The examinee is required to demonstrate his or her ability to send and transcribe in Morse code, plain texts, figure groups, punctuation and other signs:

- at a speed not less than 5 words per minute
- for a duration of at least 3 minutes
- with a maximum of 4 errors in reception
- with a maximum of 1 uncorrected and 4 corrected errors in transmission
- using a non-automatic Morse key.

New APRS Maps on the EI8IC Website

Following the recent increase in APRS (position reporting) activity in Ireland, EI8IC has placed a new suite of 30 Irish maps on his website. Each map covers a 1x1 degree area and shows live Irish APRS data overlaid above background information that includes roads, towns, counties, etc. You can turn the graphics on and off, and choose how the APRS returns are displayed in a variety of different ways.

Each map is also available for use on your own UI-View system: click on 'Export' and follow the instructions.

This is an on-going work and suggestions and comments are welcome.

<http://www.mapability.com/ei8ic/>

Ham Map Heaven. Contester Resources. Free zone maps, and contest bandplans. The most comprehensive free prefix maps on the web.

Free IOTA Beam-Heading tool

Contest Calendar

October 2005

29/30th	0000-2359	CQ Worldwide DX Contest	SSB
29/30th	0001-2359	10-10 Int. Fall Contest	CW/DIGI

November 2005

5/6th	1200-1200	Ukrainian DX Contest	CW/SSB/RTTY
12/13th	0000-2359	Worked All Europe DX Contest	RTTY
12/13th	0700-1300	Japan International DX Contest	SSB
12/13th	1200-1200	OK/OM DX Contest	CW
19/20th	1200-1200	LZ DX Contest	CW/SSB
19/20th	1600-0700	All Austrian DX Contest 160m	CW
19/20th	2100-0100	RSGB 1.8 MHz Contest	CW
26/27th	0000-2359	CW Worldwide DX Contest	CW

December 2005

2/4th	2200-1600	ARRL 160m Contest	CW
10/11th	0000-2400	ARRL 10m Contest	CW/SSB
17th	0000-2400	OK DX RTTY Contest	RTTY
17th	0000-2359	RAC Canada Winter Contest	CW/SSB
17th	2100-2300	Russian 160m Contest	CW/SSB
17/18th	1400-1400	Croatian Contest	CW
17/18th	1500-1500	Stew Perry Top Band Distance Challenge	CW
17/18th	1600-1600	International Naval Contest	CW/SSB

January 2006

1st	0000-2400	ARRL Straight Key Night	CW
7th	2000-2300	EU 160m Contest	CW
8th	0400-0700	EU 160m Contest	CW
8th	0900-1059	German DARC 10m Contest	CW/SSB
7/8th	1800-2400	ARRL RTTY Roundup	Digital
21/22nd	1200-1200	Hungarian DX Contest	CW/SSB
28/29th	0000-2359	CQ 160m Contest	CW
28/29th	1200-1200	BARTG Sprint Contest	RTTY
28/29th	1300-1300	UBA DX Contest	SSB

February 2006

4/5th	0001-2359	10-10 International Winter QSO Party	SSB
4/5th	1800-1759	Mexico International RTTY Contest	RTTY
11/12th	0000-2359	CQ WW RTTY WPX Contest	RTTY
11th	1100-1300	Asia/Pacific Spring Sprint	CW
11/12th	1200-1200	Dutch PACC Contest	CW/SSB
11/12th	2100-0100	RSGB 1.8MHz contest	CW
18/19th	0000-2400	ARRL International DX Contest	CW
24/25th	2100-2100	Russian PSK Worldwide Contest	PSK31
25/26th	0000-2359	CQ WW 160m Contest	SSB
25/26th	0600-1800	French REF Contest	SSB
25/26th	1300-1300	UBA DX Contest	CW
26th	0900-1100	High Speed Club CW Contest (1)	CW
26th	1500-1700	High Speed Club CW Contest (2)	CW

For details of smaller contests and links to contest rules and results try the following:

WA7BNM Contest Calendar <http://www.hornucopia.com/contestcal/>
SM3CER Contest Service <http://www.sk3bg.se/contest/>

Shannon Basin Radio Club EI2SBC Sprint Challenge

This challenge is open to all licensed amateurs, experimenters, and short wave listeners living in EI.

The purpose of this sprint challenge is to encourage radio operators to be active and short wave listeners to take the final step towards their experimenters licence.

1 General

This challenge is open to all experimenters and short wave listeners who must operate in accordance with the terms of their licence.

- 1.1 Only one contact to be claimed per band with a specific station.
- 1.2 Points will be deducted for errors in the log.
- 1.3 Duplicate contacts must be logged and clearly marked without claim for points.
- 1.4 Proof of contact may be required.
- 1.5 This challenge is fixed and is single operator with no assistance for log keeping etc.

2 Date and Time.

Sunday the 06th of November 2005 from 1400 to 1800

3 Sections.

Open Section

Only one section max 400W PEP with no restriction on the number, type, or height of antennas.

4 Inspection

Stations may be subject to random inspections by representatives of the challenge organisers.

5 Bands and Modes

SSB & CW contacts in the 1.8, 3.5, 7, 14, 21, 28 MHz bands, operations are to be within contest preferred segments as per the IARU Region 1 band plan.

6 Scoring

- 6.1 Points will be awarded for each completed QSO as per SD logging Type 8. SSB Field Day

Country Multipliers on each Band

IARU Region 1: Score 2-Points

Portable or Mobile: Score 5-Points

Other QSOs: Score 3-Points

- 6.2 Points not to be claimed for contacts with competing stations.

- 6.3 Log entries for which a point is claimed to show the following,
Date/Time,Band,Mode, station worked, signal report sent/received, together with Contact # eg 59 001

6.4 Entries

Entries to be submitted as follows, typed, disc, e-mail, or hand written, c/w score claimed, and statement that the rules and the spirit of the challenge were adhered to, and sent to the contest manager:

Noel Mulvihill, Hillquarter, Coosan, Athlone, Co, Westmeath.

Or E-mail nfmulvihill@eircom.net

not later than the 20th of December 2005

7 Awards

- 7.1 To the highest checked score on SSB
To the highest checked score on CW
To the highest checked score on SWL.

Inishowen Lighthouse Activated by South Dublin Radio Club

A group of ten members from South Dublin Radio Club travelled to Inishowen to activate the lighthouse there for the Lighthouses on the Air weekend on August 20/21st.

The lighthouse is located on the Inishowen Peninsula near Moville in North County Donegal. (55°13.6' North and 6° 55.7' West)



Over 200 contacts were made including a KL7 and an HS station using only wire antennas and 100 watts!

The operation was organised by Daniel EI9FHB and much thanks is due to him for his superb efforts and not forgetting the hospitality of the Lighthouse keeper through out the weekend.

Members also took time out to examine the lighthouse equipment and were very impressed by what they saw.

The lighthouse reference is IRE043.



Pictured are William MI0XMN, Davey GI3OBO, Nicky EI2JL and Tom EI7HT



Ken EI4IU and Tomás EI7AV shake on the deal at the Cork Rally in Blarney.

EI Results CQWW SSB 2004

MS	EI7M	8,235,051	5,862	152	61
MS	EI9E	2,544,657	2,465	103	416
All	EI4DW	672,384	946	74	235
All (Low Pwr)	EI6FE	123,032	375	41	141
All (Low Pwr)	EI7CC	76,736	297	41	135
All (Low Pwr)	EI5FQB	54,252	232	36	101
All (Low Pwr)	EI7JK	8,502	82	23	55
15m (Low Pwr)	EI2VNO	148,810	818	22	93
15m (Low Pwr)	EI9ES	6,512	101	11	33
20m (Low Pwr)	EI4CF	165,837	684	34	115
20m (Low Pwr)	EI7GY	3,861	67	9	30
40m (Low Pwr)	EI6JK	31,968	383	13	61
All Low Assisted	EI2JC	20,5560	134	21	59

Check Log received from EI4DJB

CQWW SSB EI Records

(Up to and Including 2004)

	Callsign	Score	QSOs	Zones	DXCC	Year
High Power						
All	EI8IR	3,325,350	3,508	112	413	2003
10	EI3JE	692,958	2,155	34	113	2002
15	EI8GS	506,850	1,808	33	122	2002
20	EI2CN	605,914	2,080	35	107	1984
40	EI5GM	146,475	1041	20	85	2003
80	EI8IR	159,965	1,203	21	86	2002
160	X					
Low Power						
LAll	EI7GL	700,006	1,164	77	312	2000
L10	EI4DW	279,070	1,173	23	95	2000
L15	EI6FR	392,657	1,451	33	124	2000
L20	EI8IC	230,184	1,191	31	108	2001
L40	EI6JK	31,968	383	13	61	2004
L80	X					
L160	EI7IU	5,989	147	6	35	
Assisted (Packet)						
A All	EI8IR	2,977,871	3,005	123	410	2000
A 10	EI4DW	472,512	1,516	29	109	2001
A 15	EI6FR	203,312	769	27	104	1997
A 20	EI2GX	204,276	1,017	27	89	1997
A40	X					
A80	X					
A160	X					
MS	EI7M	9,563,686	6,586	153	605	2001
MM	X					

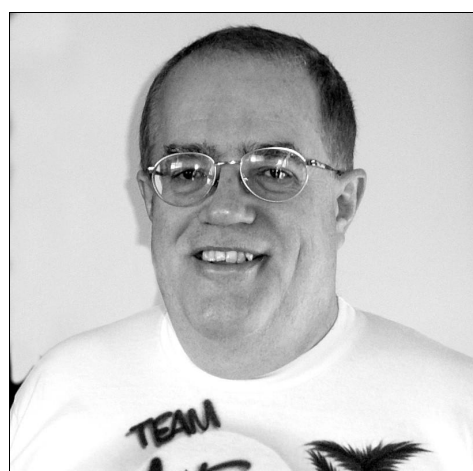
CQWW 2004 EI Record Breakers



Mark Condon EI6JK
New 40m SSB Low Power Record



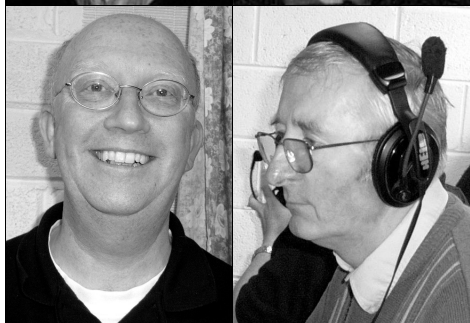
Janusz Gacon EI9JN
New 40m CW Low Power Record



Darrell Neron AB2E
New All Band CW Assisted Record

CQWW CW 2005 November 26/27th

CQWW 2004 EI Record Breakers



East Cork Group EI7M New CW Multi Single Record

Jerry EI6BT; Mannix EI5HB;
Alan G3XSV; Brendan EI0CZ;
Neil EI3JE; Dave EI4BZ.



Wieslaw Kosinski SP4Z New All Band CW Low Power Record (See full story on page 8/9)

EI Results CQWW CW 2004

MS	EI7M	5,090,005	4,510	139	516
All	EI4DW	531,355	816	79	250
All	EI2JD	188,160	592	62	183
All (Low Pwr)	EI/SP4Z	1,154,550	1,785	91	339
All (Low Pwr)	EI5DI	1,075,620	1619	82	308
All (Low Pwr)	EI7CC	62,643	199	48	109
All (Low Pwr)	EI7JK	29,882	215	34	100
All (Low Pwr)	EI9ES	2,009	45	10	31
10m (Low Pwr)	EI4CF	15,785	109	20	57
40m (Low Pwr)	EI9JN	89,395	269	8	45
Assisted					
All	EI/AB2E	1,070,520	1,453	94	346

CQWW CW EI Records

(Up to and Including 2004)

	Callsign	Score	QSOs	Zone	DX	Year
High Power						
All	EI4BZ	1,913,512	2,542	95	329	2002
10	EI6BT	198,128	838	31	91	2000
15	EI8GP	358,150	1,388	32	98	2000
20	EI3DP	525,968	1,715	36	106	1996
40	EI4BZ	197,912	1,131	23	81	2000
80	EI4BZ	142,870	1,140	18	73	2001
160	EI7M (9HC)	123,214	858	19	72	1996
Low Power						
LA11	EI/SP4Z	1,154,550	1,785	91	339	1999
L10	EI5DI	238,784	1,087	25	66	1992
L15	EI6FR	246,848	1,171	32	101	1998
L20	EI6FR	264,537	1,035	29	104	1996
L40	EI9JN	89,395	269	8	45	2004
L80	EI6FR	56,161	742	12	59	1997
L160	EI7IU	31,507	482	11	50	1998
Assisted (packet)						
A All	EI/AB2E	1,070,520	1,453	94	346	2004
A 10	EI6FR	370,678	1,269	36	118	1999
A 15	No entry					
A 20	EI8GP	142,044	602	26	88	1996
A40	No entry					
A80	No entry					
A160	No entry					
MS	EI7M	5,090,005	4,510	139	516	2004
MM	No entry					



Reading the Mail

By
Michael McNamara, EI2CL

Welcome to compilation #38 of "Reading the Mail" – an account of IRTS incoming QSL Bureau activity from 30 July to 30 September 2005.

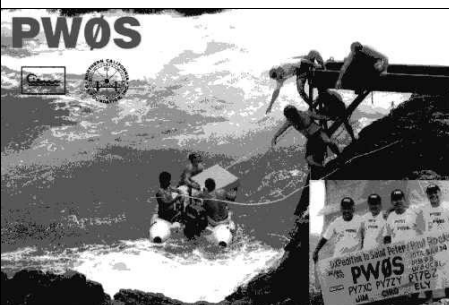
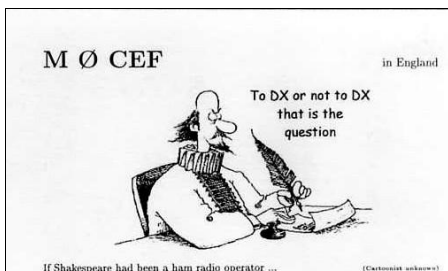
In keeping with the usual summer-time doldrums, there is not much to report but, for the record, small packets (less than 1 kg) came from G3TXF, GU8D, IARC, LABRE/RS, LCRA, NZART, OVSV, RAC, WF5E-QSL service and YL2GN. Heavier lots came from ARRL and MRASZ (2kg each), RSGB and URE (3.9 kg), and DARC 10kg.

Cards from the following were thought worthy of mention:

HG50HSC, HG1000PAX, SU9VU, Y58WA, Y11BGD, 5T0CW, 5U5Z, and 9N7DX. For IOTA chasers there was: A35XM, CY0MM, FP/VE9MY, GB0SK, HK0/N2WB, RZ0ZWA/P, S9SS, VP6DI, ZL7II, ZM6CL, 3C5XA, 4S7VK, and 9M6A.

There were some nice rare countries also, in the form of K5K and PW0S – see pictures. Congratulations to all recipients. Until my next report, all best wishes and lots of good DX in the meantime.

Michael McNamara, EI2CL



Members Advertisements

For Sale:

Byonics PocketTracker, Integrated 250mw Transmitter and APRS encoder. I have two of these kits surplus to requirements @ €100 each. Optoelectronics DS-1000, Digital & Analogue Frequency Counter & recorder, 1000 Memories, 10Mhz-2.6Ghz, recently serviced & recalibrated. €350.00 o.n.o. Laipac G30L GPS, €100ono Tokyo Hy-Power HL-50B, 40-6m 50 watt Amplifier, €250.00 o.n.o. ATX Walkabout Antenna and spare MAHA Ni-Mh battery for FT-817, no reasonable offer refused. John Ronan ,jronan@tssg.org 051-302938

For Sale: 6m to 2m transverter €100.00 Buddipole , brand new €220.00 Mick EI5DCB on 051-873310

Nuacht as Gaeilge

Tá an Nuacht as Gaeilge aistraithe go 3.680MHz ar 80m. Éist gach Dómnach ag 11.30h am aitiúil.

The News in Irish has moved to 3.680MHz on 80m. Listen every Sunday at 1130 local time.

The City of Belfast Radio Amateurs Society

The City of Belfast Radio Amateurs Society held their inaugural and very successful first meeting at Shorts Social Club on the Hollywood Road in Belfast on October 17th last..

The Chairman is Davey Waugh GI3OBO, Secretary is Frank Hunter GI4NKB and the Treasurer is Charlie Dunn GI1MTF. Further information can be obtained from the secretary via email: frank.hunter@ntlworld.com or for snail mail see QRZ.com.



Outgoing QSL Bureau

Please mail your cards directly to the Outgoing Bureau Manager

Anthony Baldwin EI8JK,
Rathlin, Kilcrohane,
Co. Cork.
ei8jk@amsat.org

Cards mailed to P.O. Box 462 will be delayed.

Apology to EI3JR

Apologies to John EI3JR for using his callsign in the heading on page 10 of the July-August issue.

The article was of course written by Peter EI4JR.

Jamboree On The Air 2005

The 48th JOTA took place over the weekend of October 16/16th. Each year over 500,000 Scouts and Guides from all over the world participate in this event where Scouting experiences are shared and ideas exchanged thus contributing to the world brotherhood of Scouting.

EI stations on air for JOTA were;
EI1SI - 2nd Kerry Sea Scouts operating from Fenit
EI3SI - operating from Larch Hill Scout Campsite in Dublin
EI4SI - 132nd Dublin, Bayside operating from the Howth Martello Tower
EI5SI - operating from Mount Melleray Scout Centre in County Waterford
EI6SI - Waterford Scout County operating from the den of 1st Port of Waterford Sea Scouts in Waterford City (Saturday Only)
EI7SI - 1st Meath operating from Dunboyne, Co. Meath.
EI8SI - 1st/7th Limerick operating from Limerick City.

Groups who participated in JOTA are asked to submit reports to:

Sean O'Suilleabhain EI3IP,
National JOTA Organiser,
Scouting Ireland, Larch Hill, Dublin 16
or by Email to jota@scouts.ie.

The report form is downloadable from the Scouting Ireland Radio Scouting Webpage www.scouts.ie/jota

All reports received will be used in compiling the National Report for the WOSM in Geneva. Reports should if possible include photographs and press cuttings.

New Callsigns in South Dublin Radio Club

Congratulations to Allen Collinge, who attended the South Dublin Radio Club theory classes over the past few months who has now passed the theory test, and has been given the call sign EI3GHB.

Jim Armstrong has been recently issued with the call sign EI8JR and Shay Ryan, formerly EI6FMB has now been issued with the new call, EI7JR. Congratulations to all.

EI DXCC Listings

(as at October 1st 2005)

Mixed

344	EI7CC	Peter Ball
340	EI2GS	Frank O'Brien
339	EI8H	Patrick Fagan
334	EI6FR	Declan Craig
324	EI6S	George McClarey
306	EI2HY	Anthony O'Rourke
262	EI2GX	Tony Stack
223	EI4BZ	Dave Moore
168	EI7BA	John Tait
128	EI8HA	Jim Murphy
126	EI8IU	Brian Canning
107	EI9HQ	Declan Lennon
105	EI2JD	Thos Caffrey
104	EI5GM	Jeremy Sheehan

Phone

343	EI7CC	Peter Ball
338	EI2GS	Frank O'Brien
330	EI8EM	Alan Cronin
328	EI8AR	Bro. John Shortall
320	EI6S	George McClarey
300	EI8AU	Bill O'Reilly (SK)
256	EI3GV	Brendan de hÓra
253	EI4GK	Sean Donelan
186	EI7II	Albert Kleyn
177	EI9FE	Mike Hoare
165	EI2CH	Gerry Morgan
166	EI7GL	John Desmond
144	EI4BZ	Dave Moore
118	EI9JF	Nicki Mullally
115	EI7BA	John Tait
114	EI4EX	Hugh McCormack (SK)
108	EI8IU	Brian Canning
105	EI1CS	Rev Finbarr Buckley
101	EI3IP	Sean Ó Súilleabháin
102	EI9HQ	Declan Lennon

CW

294	EI7CC	Peter Ball
206	EI4BZ	Dave Moore
139	EI7BA	John Tait
109	EI2IH	Hugh Galt
109	EI4HM	Don Walmsley
107	EI/GM4ARJ	JW Ferguson
106	EI1DG	Patrick McGrath

RTTY/Digital

Satellite

160m		no entry
80m		no entry
40m		
112	EI7GL	John Desmond
30m		no entry
20m		
106	EI3GV	Brendan de hÓra
17m		no entry
15m		
104	EI3GV	Brendan de hÓra
12m		no entry
10m		
128	EI4GK	Sean Donelan
113	EI7GL	John Desmond
6m		
109	EI3IO	Dave Court
104	EI7GL	John Desmond
101	EI3EBB	Alan Foley
2m		no entry

The 5 Band DXCC award holders are not listed by ARRL. If you have the 5BDXCC or know of someone who has, please let us know. Holders known to us are EI8EI (SK), EI6S and EI4BZ.



Eamonn Kavanagh EI3FFB, Bansha, Co. Tipperary



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Icom IC756PRO, Top class transceiver, HF + 6m, DSP, Auto ATU. Boxed, mint €1499.00

Icom IC746 HF + 6m + 2m. 100watts all bands, Auto ATU, Boxed, mint €1,349.00

Icom IC718 Budget HF Rig from Icom, Boxed, Mint €549.00
Kenwood TS450SAT, as new condition, Auto ATU, boxed, mint condition €719.00

Yaesu FT1000MP/AC, 0-30 MHz all mode DSP, Auto ATU, built in PSU, boxed, mint condition €1,595.00

Yaesu FT920, HF + 6m. Same size as FT1000MP, Auto ATU, boxed, mint condition. €1,195.00

Alinco DX70TH, HF + 6m, 100 watts, mobile or base, in mint condition. €99.00

Kenwood TS570D. DSP, Auto ATU, 100 watts. Very good condition. €899.00

Shortwave Receivers

Icom ICR-75. 0-60 MHz all mode with DSP option. €749.00

Icom ICR-75, same as above with DSP fitted. €799.00

Icom IC-8500. Top class 0-2000 MHz all mode receiver, rare, used €1,499.00

Yaesu FRG100, 0-30 MHz with PSU, Boxed, as new. €99.00

Yaesu FRG7700. Good starter receiver, 0-30 MHz. ... €349.00

Lowe HF225. 30 kHz to 30 MHz all mode mains or 12 volt.

Great receiver €399.00

Lowe HF250. Remote control version of above with some extras features. €499.00

Sony ICF7600. Portable receiver with SSB or FM.

Receive 76 - 108 MHz. €129.00

Roberts Portable Receiver €99.00

VHF/UHF Transceivers

Kenwood TMV7E, 2m/70cm mobile. Cool blue display €349.

Yaesu FT736R Base station 2m/70cm with 6m fitted €999.00

Kenwood TM241E 50 watt 2m mobile. No bracket/book €149

Alinco DJ190 2m handheld with drop in charger €129.00

Icom IC821H 2m/70cm 45/35w base multimode, Mint .. €899

Alinco DR150 50w 2m mobile, Airband, wideband Rx ..€199

Alinco DJ576 2m/70cm handheld, nicads, charger.

New, only €225.00

Kenwood TR751E, 2m SSB rig, 25 watts. €449.00

Yaesu VX5R 6m, 2m, 70cm. 5 watt handheld with wide band receive, lithium ion battery. €289.00

Alinco DR135 50 watt 2m mobile with Airband Rx, 100 memories, data port, theft alarm. €189.00

Scanning Receivers

Bearcat 780XLT, 25-1300 MHz, no gaps, trunk tracker, 500 memories, alpha tagging. Demo model. €349.00

Bearcat BC9000, 25-1300 MHz, AM/FM/WFM, boxed and as new. €249.00

Realistic PRO 2006, 25-1300 MHz, 400 memories.

AM/FM/WFM. Great receiver. €249.00

Fairhaven RD500VX, 0-1750 MHz, all mode,

computer interface €899.00

Uniden Bearcat 780XLT, 25-1300 MHz, A>/FM/WFM, 1000 memories €279.00

Bearcat 220 XLT 66-956 MHz with gaps, 200 memories, Nicads and charger €159.00

Icom ICR10, 0-1300 MHz, all mode, no gaps, boxed, Mint condition €269.00

Special Offer: Maycom FR100, 66-512 MHz with gaps. 150 memories. Was €149.99 **NOW** only €99.00

Icom IC8500 0-2000 MHz, all mode, 1000 memories. €1,499

Alinco DJ-X2000, 100 kHz to 2100 MHz, 2000 memories, frequency counter, digital recording, CTCSS decoder/tone scan, drop in charger. Cost €675.00 new, now €449.00

Yaesu VR120, 0-1300 MHz, shirt pocket size scanner. €179

Station Accessories

Yaesu SP-8 matching speaker for FT-920 or FT1000.

Boxed, mint condition. €159.00

Watson W-30AM 30-35 Amp PSU with twin meters, volts and amps, 0-15v. €149.00

West Mountain Radio Rigblaster Pro, all mode decoder, Demo model. €279.00

Kenwood MC-80 Desk Mic. €89.00

Global AT2000 SWL ATU. €99.00

MFJ 993 Auto ATU, latest model. €279.00

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All Enquiries to Padraic Baynes, EI9JA, 087 6957154 (evenings)



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